

shaft, and the groups of blades being spaced out from each other along the longitudinal axis of the shaft;

5 - a stator in the form of a hollow cylinder which is able to receive the rotor, this stator comprising, at one end of its longitudinal axis, at least one inlet for a first fluid, at least one inlet for a second fluid and, at the other end of its longitudinal axis, an outlet for the micromixture of the fluids;

(ii) introduction of at least two fluids, at least one of which is reactive, into the micromixer;

(iii) recovery at the outlet of the micromixer of a micromixture of the fluids;

15 (iv) polymerization of the reactive fluid or fluids, this polymerization being able to occur outside the micromixer or begin inside this micromixer and continue outside this micromixer.

"Brief Description  
of Drawings"

20 Other characteristics and advantages of the invention will now be described in detail in the following description which refers to the figures, in which:

- Figure 1 represents schematically and in an exploded front view, a micromixer according to the invention;
- Figure 2 represents schematically and in a top view, a rotor of the micromixer of Figure 1;
- Figure 3 represents schematically and in a top view, a disk of the stator of the micromixer of Figure 1;
- Figure 4 represents schematically and in a top view, the assembly of the disk of Figure 3 and of the rotor of Figure 2;
- Figure 5 represents schematically and in partial section, a micromixer according to the invention;
- Figures 6 and 7 are curves showing the influence of the speed of rotation of the rotor of the micromixer

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